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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,706	05/22/2001	Shawn R. Gettemy	PALM-3650.US.P	2157

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05/20/2003

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 05/20/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

SR

Office Action Summary

Application No.

09/863,706

Applicant(s)

GETTEMY ET AL.

Examiner

Jennifer T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 10-19, 21, 22, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kent et al. (U.S. Patent No. 6,492,979) in view of Donohue et al. (U.S. Patent No. 6,262,717).

Regarding claims 1, 16 and 22, referring to Figs. 1-3, Kent teaches a display assembly for an electronic device comprising: a display mechanism (301); a plurality of pressure activated sensors (300); wherein mechanical transfer between said display mechanism (301) and said plurality of pressure activated sensors (300), and said pressure activated sensors (300) can be activated by mechanical pressure applied to the external surface of said display mechanism (301) (col. 4, lines 32-67, col. 5, lines 37-65).

Kent differs from claims 1, 16 and 22 in that he does not specifically teach single-piece bezel-less top cover enclosure display mechanism. However, Donohue teaches single-piece bezel-less top cover enclosure display mechanism (col. 8, lines 12-53, col. 14, lines 34-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the single piece cover enclosure for the touch screen assembly as taught by Donohue in the system of Kent in order to provide a waterproof and dust free environment for the touch screen.

Regarding claim 2, the combination of Kent and Donohue teaches the display mechanism is disposed above said plurality of pressure activated sensors (Fig. 3).

Regarding claim 3, Kent further teaches said display mechanism (301) is in direct contact with said plurality of pressure activated sensors (300) (col. 5, lines 50-56).

Regarding claim 4, the combination of Kent and Donohue teaches a fixed electronic circuit layer (1200) (Fig. 12, col. 4, lines 4-37 of Kent).

The combination of Kent and Donohue differs from claim 4 in that it does not specifically teach the pressure activated sensors are disposed between said circuit layer and said display mechanism. However, it would have been obvious to obtain the pressure activated sensors are disposed between said circuit layer and said display mechanism in order to easily measure small percentage changes in resistance.

Regarding claims 5 and 17, the combination of Kent and Donohue teaches a transparent flexible thermoplastic outer film (col. 8, lines 12-63 of Donohue).

The combination of Kent and Donohue differs from claims 5 and 17 in that it does not specifically teach the supporting structure that is co-molded to said transparent flexible thermoplastic outer film. However, it would have been obvious to obtain teach the supporting structure that is co-molded to said transparent flexible thermoplastic outer film in order to in order to provide a waterproof and dust free environment completely for the touch screen.

Regarding claims 6 and 18, the combination of Kent and Donohue teaches the transparent flexible thermoplastic outer film has sufficient deflection under external pressure to apply mechanical pressure to said display mechanism which applies pressure to said plurality of pressure activated sensors (col. 7, lines 29-40 of Donohue).

Regarding claims 7 and 13, the combination of Kent and Donohue teaches the plurality of pressure activated sensors (300) are operable to register a position where contact is made with said transparent flexible thermoplastic outer film (col. 4, lines 32-48 of Kent).

Regarding claims 8, 14, 19 and 24, the combination of Kent and Donohue teaches the single-piece bezel less top cover is a flat top surface free of any indentation (Fig. 2 of Donohue).

Regarding claim 10, the combination of Kent and Donohue teaches single-piece bezel-less top cover is a transparent rigid cover (col. 5, lines 9-11).

Regarding claim 11, the combination of Kent and Donohue teaches a back cover (303) (Fig. 3 of Kent).

Regarding claim 12, the combination of Kent and Donohue teaches single-piece bezel-less top cover has sufficient range of motion to allow mechanical transfer between said top cover and said plurality of pressure activated sensors (col. 5, lines 37-56 of Kent).

Regarding claim 15, the combination of Kent and Donohue teaches the single-piece bezel-less top cover has indentations to indicate button functions (Fig. 4, col. 9, lines 48-59 of Donohue).

Regarding claims 21 and 25, the combination of Kent and Donohue teaches an in-mold decoration is located under said transparent single-piece bezel-less cover and above said flat panel display (col. 8, lines 12-53, col. 14, lines 34-40 of Donohue).

3. Claims 9, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kent et al. (U.S. Patent No. 6,492,979) in view of Donohue et al. (U.S. Patent No. 6,262,717) and further in view of Singh et al. (U.S. Patent No. 6,400,376).

Regarding claims 9, 20 and 23, the combination of Kent and Donohue differs from claims 9, 20 and 23 in that it does not specifically teach an accelerometer operable to identify the parameters of a valid input event. However, Singh teaches an accelerometer operable to identify the parameters of a valid input event (col. 5, lines 4-15). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the an

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accelerometer as taught by Singh in the system of combination of Kent and Donohue in order to provide pressure threshold to differentiate a valid input from invalid inputs that may result from.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Leenhouts et al. (U.S. Patent No. 6,424,403) teaches touch sensor display.

Makinwa et al. (U.S. Patent No. 5,510,813) teaches data processing device comprising a touch screen and a force sensor.

Yates, IV (U.S. Patent No. 5,579,036) teaches touch screen device and shielding bracket therefor.

Colgan et al. (U.S. Patent No. 6,483,498) teaches LCD with integrated resistive touch sensor.

Frisch et al. (U.S. Patent No. 5,854,625) teaches force sensing touchpad.

Crutchfield (U.S. Patent No. 5,357,061) teaches digitizer tablet having high permeability grid shield.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**.

The examiner can normally be reached on Mon-Fri from 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

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Washington, DC. 20231

Or faxed to: 703-872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the Technology Center 2600 Customer Service Office whose telephone
number is 703-306-0377.

Jennifer T. Nguyen
Patent examiner
Art Unit 2674



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600